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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/491,994	01/26/2000	Curtis Gregory Kelsay	10990356-1	9325

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FORT COLLINS, CO 80527-2400

EXAMINER
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WILLIAMS, KEVIN D

ART UNIT	PAPER NUMBER
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2854

DATE MAILED: 07/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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**Office Action Summary**

Application No.

09/491,994

Applicant(s)

KELSAY, CURTIS GREGORY

Examiner

Kevin D. Williams

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 April 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 42 and 45-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 42 and 45-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 42, 45, 48, and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pressler (US 6,005,700) in view of Suzuki (US 5,857,065).

Pressler teaches a housing 100 having a printed circuit assembly 108 disposed within the housing, a direct wire port 228 electrically coupled to the printed circuit assembly, an optical transducer 150 electrically coupled to the printed circuit assembly and configured to transmit information optically, an optical data port 172 formed in the housing, a light pipe assembly 160 optically coupling and providing communication between the optical transducer 150 and the optical data port 172, a transmit light pipe 160 adapted to optically transmit information from the optical transducer to the optical data port, the optical data port being arranged to communicate with an open environment (Fig. 7), the transmit light pipe being configured to exit and diverge (col. 7, lines 14-17) light from the optical data port to the open environment, a transmit lens 324 configured to increase an angle of illumination of light exiting the optical data port to the open environment, the housing having a first side and a second side,

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where the printed circuit assembly, the optical transducer, and the light pipe assembly are disposed within the housing, the direct wire port communicating with the first side (left in Fig. 3) of the housing and the optical data port communicates with the second side (right in Fig. 3) of the housing, the second side of the housing being opposite the first side of the housing.

Pressler does not teach a print engine disposed within the housing, an optical transducer configured to receive information optically, a light pipe assembly providing bi-directional communication between the optical transducer and the optical data port, and a receive light pipe adapted to optically receive information via the optical data port and optically transmit the received information to the optical transducer.

Suzuki teaches a print engine<sup>10</sup> disposed within a housing, an optical transducer 57 configured to transmit and receive information optically, bi-directional communication between the optical transducer and an optical data port 65, and optically receiving information via the optical data port and optically transmitting the received information to the optical transducer.

In view of the teaching in Suzuki to provide bi-directional communication, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Pressler to have a receive light pipe and for the computer peripheral device to be a printer as taught by Suzuki, in order to increase the versatility of the device by providing bi-directional communication.

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3. Claims 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pressler in view of Suzuki as applied to claims 42, 45, 48, and 49 above, and further in view of Sedlmayr (US 6,034,818).

Pressler in view of Suzuki teaches the claimed invention except for the receive light pipe being configured to converge light from the open environment on the optical transducer and a receive lens configured to collimate light from the open environment into the receive light pipe.

Sedlmayr teaches a receive light pipe 75 being configured to converge light and a receive lens 71 configured to collimate light into the receive light pipe (Fig. 27A).

It would have been obvious to one of ordinary skill in the art at the time of the invention to additionally modify Pressler to have the receive lens as taught by Sedlmayr, in order to collimate the light entering the receive pipe.

### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin D. Williams whose telephone number is (571) 272-2172. The examiner can normally be reached on Monday - Friday, 8:30am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew H. Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KDW  
July 1, 2004



ANDREW H. HIRSHFELD  
SUPERVISORY PATENT EXAMINER  
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